

The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/d³) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are chemically enriched, or large metallic deposits undergoing weathering would be expected to produce identifiable anomalies.

Geological Survey of Canada
 Resource Geophysics and Geochemistry Division

CONTRACTORS

Sample collection by Rogers Exploration Services Ltd., Whitehorse
 Sample preparation by Golder Associates, Ottawa
 Gold analysis by Chemex Labs Limited, Vancouver, B.C.

Sediment chemical analysis by Barringer Magenta Ltd., Rexdale, Ontario
 Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

This map forms one of a series of maps released by the Geological Survey of Canada, Open Files 1217 to 1220. Each Open File consists of maps of various geochemical variables: 21 for stream sediment, 3 for stream water and 1 sample site location.

Copies of map material and listings of field observations and analytical data, from which the material was prepared, may be available at users expense by application to:

K.G. Campbell Corporation
 880 Wellington St.
 Bay 238
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The data are also available in digital form. For further information please contact:

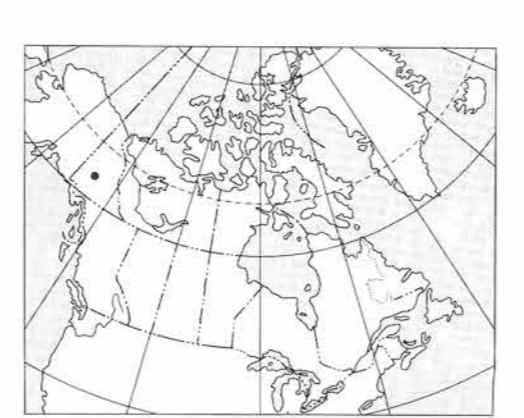
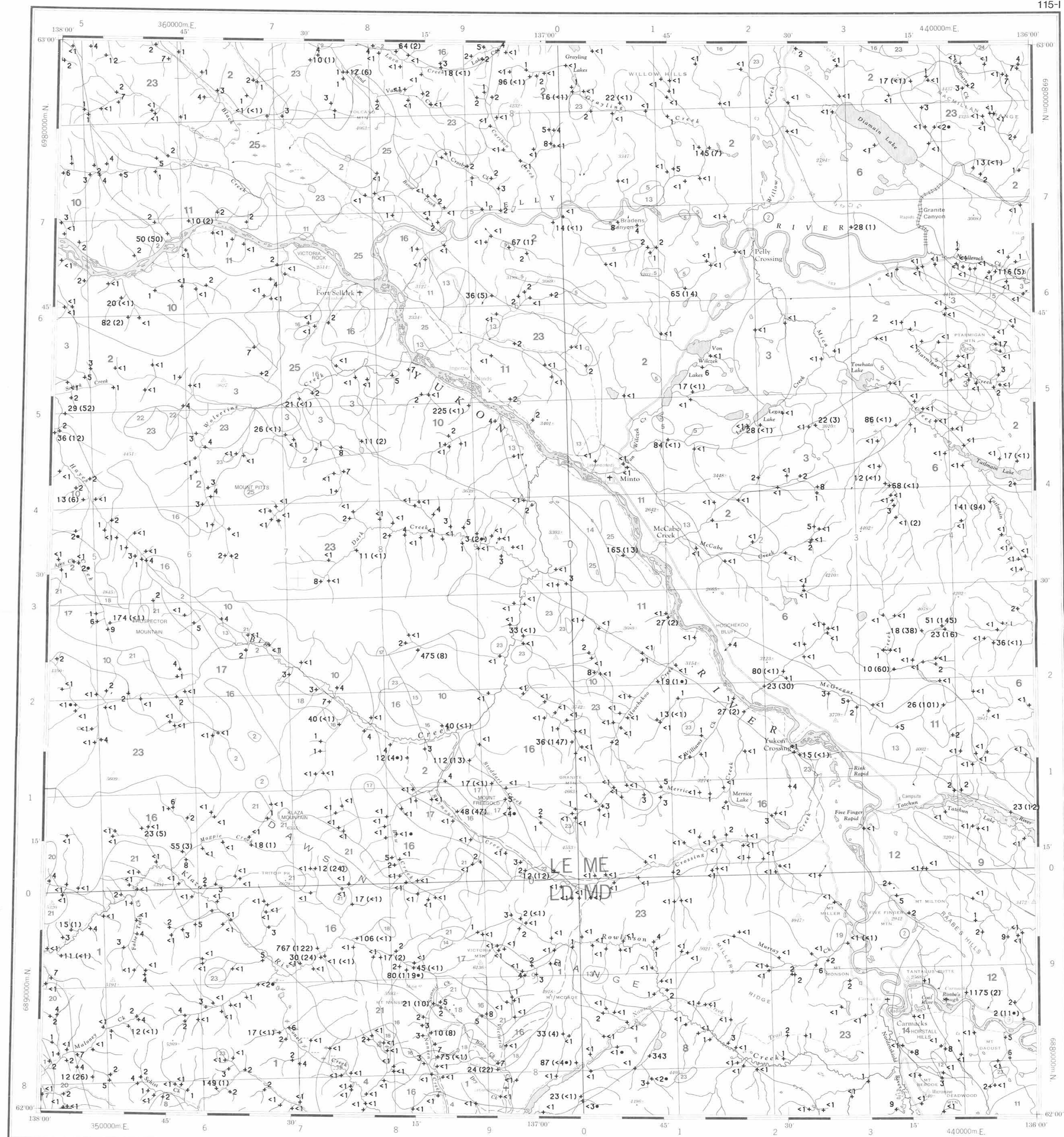
The Director
 Computer Science Centre
 Department of Energy, Mines and Resources
 Ottawa, Ontario
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Please refer to Open File text for discussion of gold presentation format and geochemical interpretation.

- Undivided surficial deposits; alluvium, glacial till and moraine, outwash and ice contact deposits, volcanic ash, loess, colluvium
- Glaciers and permanent snowfields
- Bedrock exposures; includes discontinuous veneer of undivided glacial drift

- SYMBOLS
- Surficial deposit boundary
 - Limit of Pre-Reid ice advance
 - Limit of McConnell (Ruby) ice advance
 - Meltwater channels, outwash deposits, indicating direction of flow
 - Glaciation lineation parallel to ice flow direction, includes fluting, crag and tail, roches moutonnées and drumlinoid forms, direction of flow indicated
 - Drumlinoid form, direction of movement inferred, not inferred

Sources of information:
 Bostock, H.S. (1936) Geology - CARMACKS SHEET, Yukon Territory, Canada Department of Mines, Bureau of Economic Geology, Geological Survey, Map 340A (1:253,400 scale).
 Hughes, O.L., Campbell, R.B., Muller, J.E., and Wheeler, J.O. (1968) Glacial Map of Yukon Territory, Geological Survey of Canada, Map 6-1968, (1:1 000 000 scale) to accompany GSC Paper 68-34.
 Prest, V.K., Grant, D.R., and Rampton, V.N. (1967) Glacial Map of Canada, Geological Survey of Canada (1:5 000 000 scale).

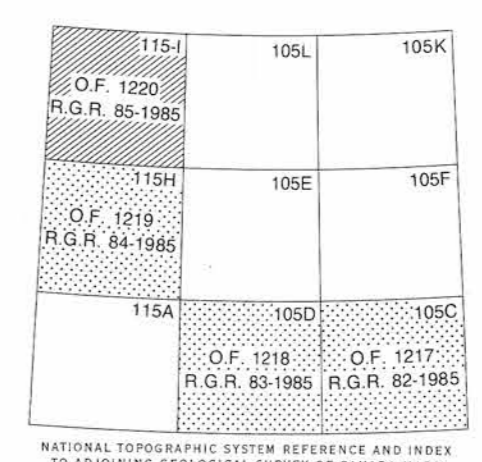
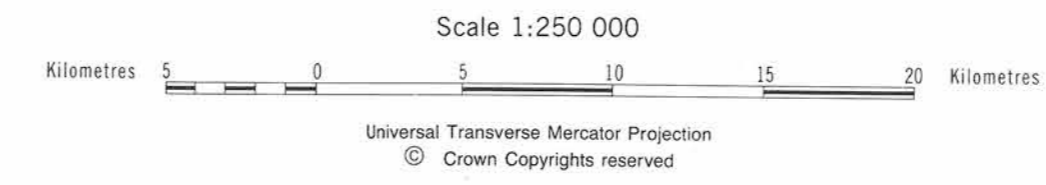


Elevation in feet above mean sea level

Mean magnetic declination 1986, 30°25' East, decreasing 13.6' annually. Readings vary from 30°14' E in the SE corner to 30°36' E in the NW corner of the map area

GOLD (ppb)
 GSC OPEN FILE 1220
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 85-1985
 CANADA-YUKON
 MINERAL DEVELOPMENT AGREEMENT (1984-89)
 STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
 SOUTHERN YUKON TERRITORY, 1985

Base map at the same scale published by the Surveys and Mapping Branch in 1974. Streams were revised by the Geological Survey of Canada for this edition.



LEGEND

QUATERNARY	RECENT	SELKIRK GROUP
25	RS 64*	Basalt, andesite flows, breccia, tuff
TERTIARY	LATE TERTIARY	LTG 62 Rhyolite porphyry, granite, granodiorite
	OLIGOCENE AND MIOCENE	
	CARMACKS GROUP	
23	OMCV 60	Andesite, basalt, breccia
	OLIGOCENE	
	CARMACKS GROUP	
22	OCs 60	Conglomerate, sandstone, shale
	EOCENE	
	MOUNT NANSÉN GROUP	
21	EMN 59	Acid to intermediate tuff, breccia
	LOWER TERTIARY	
20	TFP 58	Feldspar porphyry dykes, flows
19	TVB 58	Basalt
	EARLY TERTIARY	
18	ETF 57	Granite and syenite porphyry, rhyolite
CRETACEOUS		
17	KY 52	Syenite, monzonite
16	KQM 52	Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite
JURASSIC AND CRETACEOUS		
	DEZADEASH GROUP	
15	JKD 51	Argillite, greywacke, conglomerate, volcanics
14	JKT 51	TANTALUS: Conglomerate, siltstone, arkose, coal
13	JKDI 51	Diorite, hornblende diorite
JURASSIC		
	LABERGE GROUP	
12	JL 47	Greywacke, arkose, conglomerate
TRIASSIC		
11	TV 42	Basaltic greenstone
10	TGDN 42	Foliated hornblende granodiorite, quartz
	UPPER TRIASSIC	
	LEWES RIVER GROUP	
9	UTC 45	Limestone
MESOZOIC UNDIVIDED		
8	MM 41	Porphyritic quartz monzonite
7	MGD 41	Granodiorite, quartz monzonite
6	MGN 41	Foliated hornblende granodiorite, quartz monzonite
PALEOZOIC UNDIVIDED		
5	PC 09	Limestone
4	PM 09	Amphibolite, schist, gneiss
3	PGDN 09	PELLY GNEISS: Foliated to gneissic granodiorite
CARBONIFEROUS AND PERMIAN		
2	CPSN 35	Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX
HADRYNIAN AND CAMBRIAN		
1	HCSN 08	Schist, gneiss, quartzite

*A mnemonic code assigned to rock types and recorded as part of field observations

Geological boundary
 Fault
 No analytical result

Geological base and legend are derived from: Map 1398A, MACMILLAN RIVER, YUKON - DISTRICT OF MACKENZIE - ALASKA, NTS SHEET 105, 115. Compiled by H. Gabrielse, D.J. Templeman-Kluit, S.L. Blusson and R.B. Campbell, Geological Survey of Canada, Energy, Mines and Resources Canada, 1980. 1:1 000 000 scale

Au value (ppb) +17
 * denotes an analysis performed on a sample weight <10 g.
 () identifies Au values corresponding to repeat analyses.
 <n denotes a result less than detection level n (ppb).
 consult text for actual sample weight when Au values denoted by * or < detection level

Examples:
 +21* Au value of 21 ppb determined on sample weight <10 g.
 +38(27*) Au value of 38 ppb on first analysis, Au value of 27 ppb on repeat analysis for sample weighing <10 g.
 +4 Au value less than detection limit of 4 ppb.